

Practice: 449 - Irrigation Water Management

Scenario # 1 IWM for row crops

Scenario Description:

Missouri

Implementation of a water management plan for producers using a checkbook method (crop grown, soil moisture conditions prior to irrigation, dates of irrigation start and stop, depths of irrigation applied, duration of irrigations, and amount of rainfall). Payment applies to irrigation water management on a row crop operation.

Resource Concerns: Insufficient Water Supply-Inefficient use of irrigation water; Degraded Plant Condition-Undesirable plant productivity and health, and Inefficient Energy Use-Equipment and facilities.

Associated Practices: 442-Irrigation System Sprinkler, 443-Irrigation System Surface and Subsurface, 433-Irrigation Water Measurement, 434-Soil Moisture Measurement, 433- Irrigation Flow Measurement.

Before Practice Situation:

The irrigator decides when to irrigate based on general crop or soil appearance or limited soil moisture monitoring. System run times are based on past apparent success. The typical irrigated field is a 125 acre corn field with a sprinkler irrigation system. ☐

After Practice Situation:

Irrigations are scheduled based on measured crop water requirements. Records are used to evaluate results of past irrigation events and influence future irrigations. The irrigator keeps records of soil moisture, crop water use, rainfall amounts and irrigation timing and amounts. At the end of the irrigation season all the data has been reviewed and evaluated. Improvements planned for the next season have been determined. ☐

Scenario Feature Measure:

Irrigated Area Managed

Scenario Typical Size:	125	Acre	Tot Unit Cost	\$10.91
------------------------	-----	------	---------------	---------

Cost Category	Component Name	Quantity	Unit	Unit Cost	Cost
Labor	General Labor	8	Hour	\$21.56	\$172.48
Labor	Supervisor or Manager	32	Hour	\$37.21	\$1,190.72
Total Cost:					\$1,363.20

Payment types:

PayType	Unit Payment	PayType	Unit Payment
EQIP	\$7.09	EQIP-HU	\$9.82
EQIP-NOI	\$8.18	EQIP-HUNOI	\$9.82
EQIP-NOFEI	\$8.18	EQIP-HUNOFEI	\$9.82
EQIP-MRBI	\$8.18	EQIP-HUMRBI	\$9.82

Practice: 449 - Irrigation Water Management

Scenario # 2 IWM for microirrigation systems and specialty crops

Scenario Description:

Missouri

Implementation of a water management plan for producers using a checkbook method (crop grown, soil moisture conditions prior to irrigation, dates of irrigation start and stop, depths of irrigation applied, duration of irrigations, and amount of rainfall). Payment applies to irrigation water management on a specialty crop operation, or an operation utilizing microirrigation.

Resource Concerns: Insufficient Water Supply-Inefficient use of irrigation water; Degraded Plant Condition-Undesirable plant productivity and health, and Inefficient Energy Use-Equipment and facilities.

Associated Practices: 441-Irrigation System Microirrigation, 433-Irrigation Water Measurement, 434-Soil Moisture Measurement, 433- Irrigation Flow Measurement.?

Before Practice Situation:

The farmer decides when to irrigate based on general crop or soil appearance or limited soil moisture monitoring. System run times are based on past apparent success. The typical irrigated field is a 30 acre corn field with a surface irrigation system.

After Practice Situation:

Irrigations are scheduled based on measured crop water requirements. Records are used to evaluate results of past irrigation events and influence future irrigations. The irrigator keeps records of soil moisture, crop water use, rainfall amounts and irrigation timing and amounts. At the end of the irrigation season all the data has been reviewed and evaluated. Improvements planned for the next season have been determined. ?

Scenario Feature Measure:

Irrigated Area Managed

Scenario Typical Size:	30	Acre	Tot Unit Cost	\$49.61
------------------------	----	------	---------------	---------

Cost Category	Component Name	Quantity	Unit	Unit Cost	Cost
Labor	Supervisor or Manager	40	Hour	\$37.21	\$1,488.40
Total Cost:					\$1,488.40

Payment types:

PayType	Unit Payment	PayType	Unit Payment
EQUIP	\$32.25	EQUIP-HU	\$44.65
EQUIP-NOI	\$37.21	EQUIP-HUNOI	\$44.65
EQUIP-NOFEI	\$37.21	EQUIP-HUNOFEI	\$44.65
EQUIP-MRBI	\$37.21	EQUIP-HUMRBI	\$44.65
EQUIP-NSHTI	\$37.21	EQUIP-HUNSHTI	\$44.65